WHAT IS CLAIMED IS:

Sub A1)

1. An image processing device comprising:

a scanner unit for inputting an image signal;

a bus to which the image signal input from said scanner unit is supplied;

a control unit for accessing said bus;

a first bidirectional interface for performing transmission/reception of the image signal between said bus and an external computer; and

a second bidirectional interface, having the same data standards as those of said first bidirectional interface, for performing transmission/reception of the image signal between said bus and a printer unit.

2. The device according to claim 1, wherein said printer unit is arranged outside said device.

3. The device according to claim 1, wherein said printer unit is arranged in said device.

4. The device according to claim 1, wherein said external computer performs predetermined processing of the image signal received through said first bidirectional interface.

5. The device according to claim 4, wherein said scanner unit inputs a color image signal, and the predetermined image processing includes processing of controlling color balance of the color image signal read from said scanner unit.

6. The device according to claim 5, wherein the color image signal input from said scanner unit includes R, G, and B signals, and the processing of controlling color balance is performed by adjusting intensities of the R, G, and B signals.

7. The device according to claim 4, wherein the predetermined image processing includes processing of controlling a resolution of the image signal read from said scanner unit.

8. The device according to claim 4, wherein the predetermined image processing includes processing of controlling a read magnification of the image signal in said scanner unit.

9. The device according to claim 4, wherein the image signal input from said scanner unit can be processed by said external computer and thereafter supplied to said printer unit through said first bidirectional interface and said second bidirectional interface.

Sub A2) 10. The device according to claim 4, further comprising a memory for recording set values used for the image processing by said external computer.

11. The device according to claim 10, wherein the set values include a reference value determined in accordance with characteristics of said scanner unit.

12. The device according to claim 10, wherein the set values include a reference value determined in accordance with characteristics of said printer unit.

13. The device according to claim 4, wherein said scanner unit includes a photoelectric conversion unit for converting an optical image to an electrical signal, and an image processing unit for performing predetermined processing of an image signal from said photoelectric conversion unit.

14. The device according to claim 13, wherein the image signal processed by said image processing unit can be supplied to said printer unit without interposing said external computer.

15. The device according to claim 1, wherein said first and second bidirectional interfaces are based on the IEEE-P1284 standards.

16. The device according to claim 1, wherein said external computer has a modem capable of transmitting the image signal received through said first bidirectional interface to a public telephone line.

17. An image processing method comprising the steps of:

inputting a color image signal from a scanner unit;

supplying the image signal input from said scanner unit to a bus;

transferring the image signal from said bus to a computer arranged separately from said scanner unit through a first bidirectional interface;

transferring the image signal processed by said computer to said bus through said first bidirectional interface; and

transferring the image signal processed by said computer from said bus to a printer unit through a second bidirectional interface having the same data standards as those of said first bidirectional interface.

18. The method according to claim 17, wherein said printer unit is arranged separately from said scanner unit.

19. The method according to claim 17, wherein said printer unit is arranged integrally with said scanner unit.

20. The method according to claim 17, wherein the image signal from said scanner unit is subjected to predetermined processing and thereafter transferred to said bus.

21. The method according to claim 20, wherein the image signal subjected to the predetermined processing can be transferred from said bus to said printer unit without interposing said computer.

22. The method according to claim 17, wherein said first and second bidirectional interfaces are based on the IEEE-P1284 standards.

SUB A4)

23. The method according to claim 17, wherein said external computer has a modem capable of transmitting the image signal received through said first bidirectional interface to a public telephone line.

24. An image processing device comprising:

a scanner for inputting an image signal;

an image processing circuit for processing the image signal input from said scanner;

an interface for transmitting/receiving the image signal to/from an external computer; and

output means for outputting the processed image signal,

wherein said device has a plurality of modes including first and second modes, uses said image processing circuit in the first mode to process and output the image signal without using said external computer, and uses said external computer in the second modes to process the image signal.

25. The device according to claim 24, wherein said interface is based on the IEEE-P1284 standards.

SUB A5)

26. The device according to claim 24, wherein said external computer has a modem capable of processing the

image signal received through said interface and transmitting the image signal to a public telephone line.

27. An image processing method comprising the steps of:

inputting an image signal;

processing the input image signal by using an internal circuit;

transferring the image signal to an external computer;

receiving the image signal processed by said external computer;

outputting the image signal processed in a first mode by using said internal circuit without using said external computer; and

outputting the image signal processed in a second mode by using said external computer.

28. The method according to claim 27, wherein transfer and reception are performed through a bidirectional interface based on the IEEE-P1284 standards.

Sub A4) 29. The method according to claim 27, wherein the transferred image signal can be processed by said external computer and transmitted to a public telephone line.

30. An image processing device comprising:

a scanner for inputting an image signal;

an image processing circuit for processing the image signal input from said scanner;

a bus to which the image signal subjected to predetermined image processing by said image processing circuit is transferred;

an interface for performing transmission/reception of the image signal between said bus and an external computer; and

output means for outputting the image signal processed by said image processing circuit and processed by said external computer.

31. The device according to claim 30, wherein the predetermined image processing by said image processing circuit includes conversion processing from a color image signal unique to said scanner to a color image signal processible by said external computer.

32. The device according to claim 31, wherein the predetermined image processing by said image processing circuit includes conversion processing of a color expression form of the color image signal.

33. The device according to claim 31, wherein the predetermined image processing by said image processing circuit includes input masking processing.

34. The device according to claim 30, wherein image processing performed by said external computer includes

processing of controlling color balance of a color image signal read from said scanner.

35. The device according to claim 34, wherein the color image signal includes R, G, and B signals, and the processing of controlling color balance is performed by adjusting intensities of the R, G, and B signals.

36. The device according to claim 30, wherein said interface is based on the IEEE-P1284 standards.

37. The device according to claim 30, wherein said external computer has a modem capable of processing the image signal received through said interface and transmitting the image signal to a public telephone line.

38. An image processing device comprising:

input means for inputting an image signal;

a bus to which the image signal is transferred;

an interface for performing transmission/reception of the image signal between said bus and an external computer;

an image processing circuit for processing the image signal processed by said external computer; and

a printer for printing the image signal processed by said image processing circuit.

39. The device according to claim 38, wherein predetermined image processing by said image processing circuit includes conversion processing from a color

image signal processible by said external computer to a color image signal unique to said printer.

40. The device according to claim 39, wherein the predetermined image processing by said image processing circuit includes conversion processing of a color expression form of the color image signal.

41. The device according to claim 39, wherein the predetermined image processing by said image processing circuit includes output masking processing.

42. The device according to claim 38, wherein the image processing performed by said external computer includes processing of controlling a resolution of the image signal printed by said printer.

43. The device according to claim 38, wherein the image processing performed by said external computer includes processing of controlling a print magnification of the image signal in said printer.

44. The device according to claim 38, wherein said interface is based on the IEEE-P1284 standards.

45. The device according to claim 38, wherein said external computer has a modem capable of processing the image signal received through said interface and transmitting the image signal to a public telephone line.

46. An image processing method comprising the steps of:

inputting an image signal from a scanner;

processing the image signal input from said scanner by an image processing circuit arranged integrally with said scanner;

transferring the image signal subjected to predetermined image processing by said image processing circuit to a bus;

performing transmission/reception of the image signal between said bus and an external computer; and

outputting the image signal processed by said image processing circuit and processed by said external computer.

47. The method according to claim 46, wherein the predetermined image processing by said image processing circuit includes conversion processing from a color image signal unique to said scanner to a color image signal processible by said external computer.

48. The method according to claim 47, wherein the predetermined image processing by said image processing circuit includes conversion processing of a color expression form of the color image signal.

49. The method according to claim 47, wherein the predetermined image processing by said image processing circuit includes input masking processing.

50. The method according to claim 46, wherein the image signal subjected to the predetermined processing

is processed by said external computer and transmitted to a public telephone line.

51. An image processing method comprising the steps of:

transferring an input image signal to a bus;

performing transmission/reception of the image signal between said bus and an external computer;

performing predetermined processing of the image signal by an image processing circuit, the image signal being processed by said external computer; and

printing the image signal processed by said image processing circuit by a printer arranged integrally with said image processing circuit.

52. The method according to claim 51, wherein the predetermined image processing by said image processing circuit includes conversion processing from a color image signal processible by said external computer to a color image signal unique to said printer.

53. The method according to claim 52, wherein the predetermined image processing by said image processing circuit includes conversion processing of a color expression form of the color image signal.

54. The method according to claim 52, wherein the predetermined image processing by said image processing circuit includes output masking processing.

55. The method according to claim 51, wherein the image processing performed by said external computer includes processing of controlling a resolution of the image signal printed by said printer.

56. The method according to claim 51, wherein the image processing performed by said external computer includes processing of controlling a print magnification of the image signal in said printer.

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